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| ONR Site Report  Rolls-Royce Submarines Limited – Nuclear Fuel Production Plant, Raynesway & Neptune Reactor, Raynesway |



ONR Site Report

Rolls-Royce Submarines Limited - Nuclear Fuel Production Plant, Raynesway & Neptune Reactor, Raynesway

Report for period: 1 July – 31 December 2023

Authored by: Principal Inspector

Approved by: Superintending Inspector

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Foreword

This report is issued as part of our commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Rolls-Royce Submarines Limited (RRSL) Local Liaison Committee (LLC) and are also available on our website (<http://www.onr.org.uk/llc/>).

Our site inspectors usually attend RRSL Local Liaison Committee (LLC) meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should email us at [contact@onr.gov.uk](mailto:contact@onr.gov.uk).

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# Inspections

## Date(s) of inspection

Our site inspector undertook interventions on the following dates during the report period:

* 28 July
* 5, 6, 7, 15, 26 September
* 1, 15, 16 November
* 15 December

# Routine matters

## Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

* the conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended)
* the Energy Act 2013
* the Health and Safety at Work etc Act 1974 (HSWA74)
* regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99)

The inspections entail monitoring the licensee’s actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of the Raynesway licensed sites covered the following:

* management of operations including control and supervision
* staff training, qualifications and experience
* modifications to plant, equipment and safety cases
* emergency preparedness
* incidents on the site
* radiological protection
* organisational changes
* periodic safety review
* conventional (non-nuclear) health and safety

Members of the public, who would like further information on our inspection activities during the reporting period, can view site Intervention Reports at [www.onr.org.uk/intervention-records](http://www.onr.org.uk./intervention-records).

Should you have any queries regarding our inspection activities, please email [contact@onr.gov.uk](mailto:contact@onr.gov.uk).

## Emergency exercise: ‘DERVENTIO II’

In November 2023, a team of our inspectors observed RRSL's emergency demonstration exercise 'DERVENTIO II', making observations in the Emergency Control Centre (tactical), Bronze Command (operational), contact muster area, and technical cell, as well as observations of the deployed teams. We judged that this was an adequate demonstration of RRSL’s emergency arrangements.

Command and control dynamics in both silver and bronze commands were positive, as was the performance of the deployed teams and the decontamination and casualty handling aspects of the exercise. The principal learning point for RRSL was in ensuring that the emergency services can be deployed quickly onto the site in the event that they are required.

## Contact Shop post-implementation inspection

In May 2023, RRSL provided us with its proposal for a revised safety case for the Contact Shop facility. On the basis of minimal operator-facing change to administrative or engineering controls, we chose to undertake a post-implementation inspection, rather than a pre-implementation permissioning regime. RRSL implemented the case in August 2023.

In September 2023, over two days, a team of our inspectors examined several aspects of the implementation of the case, aligned with the licence conditions, including; training, duly authorised persons, operating rules, operating instructions and control and supervision of operations.

We rated the inspection as GREEN, requiring no formal action. We concluded that the level of training on the new case was appropriate, Duly Authorised Persons had been appointed, safe working limits had been introduced and were being respected, and work instructions were available at, or close to, the point of work.

## Other work

In addition to our inspections listed in Section 1.1, there were a number of other formally recorded interactions with RRSL, covering a wide range of topics, including: examination, maintenance, inspection and testing, conventional (non-nuclear) health and safety, radioactive waste management, radiation protection, the Neptune refurbishment project, and the Dreadnought Production Facility project.

Our site inspector also held several meetings to progress routine regulatory business, such as regulatory issues database reviews, regulatory interface forums as well as (separate) meetings with the internal regulatory function. Our site inspector continues to hold weekly meetings with senior RRSL management to ensure health and safety matters continue to be addressed appropriately.

Our site inspector also continues to hold periodic meetings with safety representatives to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.

# Non-routine matters

Licensees are required to have arrangements to respond to non-routine matters and events. Our inspectors judge the adequacy of the licensee’s response, including actions taken to implement any necessary improvements.

Matters and events of particular note during the period were:

## Operation conditions & limits – INF-3562

In December 2023, RRSL reported that its Interim Review of Safety process had identified a finding related to the inadequate identification of nuclear safety related assumptions and associated operational conditions and limits in the Facility Safety Cases. RRSL has produced a ‘justification for continued operation’ and has shared this with us.

RRSL has initiated an investigation to determine the significance of the items identified. We await the outcome of that investigation to determine if further action is needed.

## Contact Shop inhalation dose – INF-3060

Originally reported in the RRSL Site Report 1 January – 30 June 2023, ONR undertook preliminary enquiries in July relating to this event. As a result of our findings, we issued an enforcement letter to RRSL, focusing on shortfalls against the Ionising Radiation Regulations 2017, regulation 8.

This regulation requires employers to make a suitable and sufficient risk assessment before commencing an activity. We determined that the risk assessment in place was not sufficient to the extent necessary to identify the specific risks within the area and the necessary control measures.

Alongside the enforcement letter, we raised a level 3 regulatory issue that will track RRSL’s improvement progress across several areas, including; completion of its own investigation, revision of key risk assessments, a plan for the review of other risk assessments and completion of engineering improvements.

We expect the regulatory issue to be closed by March 2024.

# Regulatory activity

We may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, we issue regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed ‘licence instruments’ (LIs) but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an enforcement notice.

* The following LIs, enforcement notices and enforcement letters have been issued during the period:

**Table 1: Licence instruments and enforcement notices issued by ONR during this period**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Type | Ref. No. | Description |
| 6 Sep 23 | enforcement letter | ONR-EL-23-019 | Contact shop lab workshop inhalation dose |

Reports detailing the above regulatory decisions can be found on our website at <http://www.onr.org.uk/pars/>.

# News from ONR

For the latest news and information from us, please read and subscribe to our regular email newsletter ‘ONR News’ at [www.onr.org.uk/onrnews](http://www.onr.org.uk/onrnews).

# Contacts

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